Universiti Malaysia PAHANG Ergineering - Tichnology - Dreshity	SUBJECT: Organic Chemistry			MARKS: 10	
	CODE: BSK 1103	TOPIC: Chapter 1(Alkenes)			
Faculty of Industrial Sciences & Technology	ASSESSMENT: Exercise	NO: 2	DURATION: 10 MIN		
NAME:		STUDENT ID: SEC		SECTION:	

Q1. Which of the following is a geometric isomer of the given molecule?



- Q2. Alkenes can undergo complete combustion just like alkanes. Which of the reactions below is the balanced reaction for the complete combustion of propene? (1 Mark)
 - a) $CH_3CH=CH_2 + O_2 - CO_2 + H_2O$
 - b) CH₃CH=CH₂ + 4 O₂ → 3 CO₂ + 3 H₂O
 - c) CH₃CH=CH₂ + 2 O₂ → 2 CO₂ + 2 H₂O
 - d) $2 \text{ CH}_3 \text{CH}=\text{CH}_2 + 9 \text{ O}_2 \longrightarrow 6 \text{ CO}_2 + 6 \text{ H}_2 \text{O}_2$

Q3. Can the given molecule have cis-/trans- isomers?

(1 Mark)

(1 Mark)



- a) Yes, because it contains a double bond
- b) Yes, because the oxygen is only bonded to the carbon atom.
- c) No, because it contains a double bond.
- d) No, because the oxygen is only bonded to the carbon atom

Q4. Based on your knowledge of cis- and trans-, what would the alkene shown below be? (1 Mark)



- a) trans
- b) cis
- c) This alkene is neither cis- nor trans-.
- d) This molecule is not an alkene.

Q5. Using your knowledge of alkane nomenclature, what do you think the correct name for the alkene below would be? (1 Mark)

a) Butane b) Butene c) 2-Butene d) 1-Butene

Q6. The hydration of propene would produce which of the alcohols shown below? (1 Mark)

- a) CH₃CH₂CH₂OH b) CH₃CH₂OH
- c) $CH_3CH_2CH_2CH_2OH$ d) $CH_3CH(OH)CH_3$

Q7. Which of the alkenes below is cis-2-butene?

(1 Mark)



Q8. What is the name for this compound?

 $H_2C = CHCH = CHCH_2CH_3$

- a) 1,3-dihexene
- b) 1,3-hexadiene
- c) 1-2,3-4-hexdiene
- d) 3,5-hexadiene

(1 Mark)